

7.2 WASHINGTON BOULEVARD/ PASEO PADRE PARKWAY GRADE SEPARATION PROJECT CONSIDERATION OF LANDSCAPE AND HARDSCAPE

Consideration of landscape and hardscape options and other aesthetic features of the Washington Boulevard/Paseo Padre Parkway Grade Separation Project in response to discussions at the September 16, 2003 Council Work Session (PWC 8156)

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Executive Summary: A Council Work Session on the Washington Boulevard/ Paseo Padre Parkway Grade Separation Project was held on September 16, 2003. The Work Session covered project status, project costs and funding, and alternative levels of landscape, hardscape and other aesthetic features. This item is presented as a follow-up to the Work Session to respond to questions raised by the Council, present options and provide staff's recommendations regarding the proposed utility bridge over Paseo Padre Parkway and the landscape, hardscape and other aesthetic features of the project. In addition, staff will make a presentation at the City Council meeting to show new exhibits to allow the Council to better visualize the future project and the designs under consideration. The City Council will be asked to select an option for the utility crossing of Paseo Padre Parkway and determine the level of treatment for project landscape, hardscape and aesthetic features.

BACKGROUND:

Construction of railroad grade separations at Washington Boulevard and Paseo Padre Parkway has been a long-term goal of the City of Fremont. The benefits of a grade separation include improved traffic flow and safety for Fremont residents. Recently compiled information shows a trend towards an increase in train traffic and duration of times trains block the street crossings. This results in longer and more frequent delays for vehicular traffic. The grade separations will also serve to accommodate the BART Warm Springs extension.

The Washington Boulevard/Paseo Padre Parkway Grade Separation Project consists of three main components: 1) an overpass at Washington Boulevard; 2) an underpass at Paseo Padre Parkway; and, 3) relocation of approximately 1.5 miles of Union Pacific Railroad (UPRR) track. Project design is approximately 90 percent complete and construction is anticipated to begin in the summer of 2004. The Project is statutorily exempt from the requirements of the California Environmental Quality Act because it will eliminate existing railroad grade crossings. A Notice of Exemption for this project was filed by the City with the Alameda County Clerk on March 8, 2000.

A Council Work Session was held on September 16, 2003 to review current project design and status, receive Council feedback on selected design elements, review current project costs and revenue sources, and summarize project complexities and the anticipated schedule. At the Work Session, staff highlighted the current revenue shortfall of \$4.9 to \$8.5 million . To close the gap, staff is pursuing several

additional revenue sources, including State Grade Separation Funds, Senate Bill 916 Bridge Toll Funding, CMA TIP funds, and, if necessary, additional Redevelopment Agency funding.

The Work Session also included a presentation on the various design features of the project and two levels of landscape, hardscape and aesthetic features for Council consideration. To help illustrate the design features, exhibit boards, visual simulations of the future project and pictures of similar designs were shown.

In response to the presentation, Council had several questions and concerns they wanted addressed by staff. The questions and concerns were in two primary areas. First, the Council had questions about the aesthetic treatment and landscaping options and their costs at both Washington and Paseo Padre. The second area of questions focused on the need for the utility bridge at Paseo Padre Parkway and alternatives for its location. In addition, there was a request for additional exhibits to allow the Council and community to better visualize the future project.

Landscaping and Aesthetic Treatments: In response to the questions related to landscaping and aesthetic treatments staff has prepared three options. These options are:

Aesthetic Treatment Option 1 – “Bare Bones”: The bare bones alternative provides seeding of exposed slope areas for erosion control (see example picture in Exhibit A), but has no true landscaping or irrigation. The barrier walls are standard Caltrans concrete barriers and railing. Retaining walls are standard formed concrete with a plain finish. The fencing is standard galvanized chain link and lighting is provided using standard City “cobra-head” street-lights (see example picture in Exhibit B). The cost of this option is \$335,000 for Paseo Padre Parkway and \$438,000 for Washington Boulevard for a total cost of \$773,000. The “Bare Bones” option was not previously presented to City Council because of past community and Council interest in aesthetic treatment of the project.

Aesthetic Treatment Option 2 – “Base Design”: This design was shown to Council at the September 16 Work Session. For Paseo Padre Parkway it includes trees and unmowed, irrigated grass throughout the project areas (see example pictures in Exhibits C and D). Concrete form-liners are used to create a special texture on the retaining walls (see Exhibit E). For Washington Boulevard, the concrete barrier walls are upgraded and the fencing and railing include decorative steel arches with vinyl-clad mesh that meet railroad and BART requirements (see Exhibit F). Standard City street lighting (see Exhibit G) is used in most locations; however, the Washington Boulevard overcrossing receives special decorative fixtures that reflect elements of the Irvington area, including the Irvington signs and the Irvington Monument (see Exhibit H). This lighting design was the preferred design of the community. The cost of this option is \$1,184,000 for Paseo Padre Parkway and \$1,284,000 for Washington Boulevard for a total cost of \$2,468,000, an increase of \$1,695,000 above the “Bare Bones” design. These costs are currently carried in the project estimates.

Aesthetic Treatment Option 3 – “Enhanced Design”: This design was also shown to the Council at the September 16 Work Session. It includes all of the aesthetic features of Aesthetic Treatment Option 2 as well as substantial additional landscaping in median areas along Paseo Padre Parkway (see example picture in Exhibit I) and along the back of sidewalks for Washington Boulevard (see example pictures in Exhibits J and K). The cost of this option is \$1,951,000 for Paseo Padre Parkway and \$1,616,000 for

Washington Boulevard for a total cost of \$3,567,000. This represents an increase of \$1,099,000 above the “Base Design” and \$2,794,000 over the “Bare Bones”.

Staff Recommendation for Landscaping and Aesthetic Treatments: Staff is recommending the “Base Design” (Aesthetic Treatment Option 2) be selected for the landscaping and aesthetic treatment for both Paseo Padre Parkway and Washington Boulevard. Although the “Base Design” is more expensive than the “Bare Bones” option, the costs are included in the current estimates and most of the features, such as the wall treatments and fencing and lighting upgrades, cannot be easily retrofitted in the future. To be cost effective, these elements must be included in the project now or eliminated from consideration. The enhanced landscaping included in Aesthetic Treatment Option 3 could be added in the future if additional funding becomes available. The irrigation elements required to accommodate this future landscaping are included in the cost of the “Base Design.”

Staff believes that the Washington Boulevard and Paseo Padre Parkway Grade Separation areas deserve more than a bare bones treatment. This view was reinforced by input from the public at the nine previous community meetings for this project. Washington Boulevard and Paseo Padre Parkway carry a large number of vehicles and are located adjacent to neighborhoods where many people will view these improvements. In addition, Washington Boulevard acts as a gateway to the Irvington area for those entering from I-680. It is also adjacent to the Irvington business district and the future Irvington BART station. Since a major part of the Washington portion of the project is being funded with Redevelopment funds, the level of aesthetic treatment is important to Redevelopment Agency staff, in addition to the public.

Although the revenue shortfall is a critical item for the project, staff believes the elements in the “Base Design” that must be incorporated now are worth the added expense. At the same time, staff does not recommend increasing the shortfall by an additional \$1,099,000 to provide the enhanced landscaping included in Aesthetic Treatment Option 3. The maintenance cost of the “Base Design” is relatively small since most of the features require little maintenance. The “base design” maintenance cost which is estimated at \$12,200 per year. The additional landscaping of the Enhanced Design would add another \$21,600 per year to the maintenance cost.

Paseo Padre Parkway Utility Bridge: Many fiber optic lines currently run along the existing UPRR tracks at Paseo Padre Parkway and Washington Boulevard. As part of the Grade Separation Project, a water line and electrical line will be relocated into the current westerly UPRR alignment, as the intent is that this will become a utility corridor when the UPRR tracks are relocated onto the new alignment. Since Paseo Padre Parkway will be depressed below the street level, a means must be found to carry the utilities through this area.

To carry the numerous utilities through this area, they must be routed either over the new Paseo Padre Parkway underpass on a utility bridge, or they must bore under the new roadway. The construction of the depressed Paseo Padre Parkway requires approximately a 50-foot deep concrete cutoff wall to be constructed around the entire depressed portion of the roadway to block water from the high water table from entering the road. Utilities should not penetrate this wall or its integrity could be compromised. Therefore, any utilities that are routed below Paseo Padre Parkway must bore underneath the cutoff wall.

In response to Council questions about the utility bridge, three options have been developed for routing utilities that need to cross Paseo Padre Parkway in the vicinity of the grade separation. These options are:

Utility Option 1 – Utility bridge on current alignment: A prefabricated utility bridge would be placed over the depressed Paseo Padre Parkway just east of and parallel to the current UPRR alignment. This alignment would require the least relocation of the six existing fiber optic duct banks in the current UPRR and future BART corridors. The bridge could be either Cor-ten (weathered) steel or painted steel (see examples in Exhibits L and M). In the future, the bridge could also be used as a bicycle and pedestrian bridge to facilitate a proposed path between the Irvington area and Central Park that could be located along the current UPRR alignment after the UPRR tracks are relocated (see Exhibit N). The utilities would be located in duct banks under the bridge and bicycles and pedestrians could use the bridge deck as a pathway.

As currently planned, the utility bridge would carry twenty 1¼-inch PVC conduits for Level (3), four 2-inch PVC conduits for Qwest, six 2-inch PVC conduits for Sprint, eight 4-inch PVC conduits for SBC, four 2-inch PVC conduits and a 12-inch wide duct for MCI, and a possible 24-inch welded steel water line for Alameda County Water District.

The cost of this option is estimated to be \$575,000. This cost is currently being carried in the Project estimates.

Utility Option 2 – Directional bore on current alignment: Most utilities could be bored beneath the depressed Paseo Padre Parkway and cutoff wall on an alignment just east of and parallel to the current UPRR alignment. However, the eastern MCI fiber optic lines could not be relocated into this area and would have to be bored below the cutoff wall along the future BART alignment. Although this is technically feasible, BART does not want utilities in their corridor that could potentially conflict with their future construction. The cost of this option is estimated to be \$905,000, or \$330,000 more than Option 1.

Utility Option 3 – Utility bridge on new alignment: City Council requested information about relocating the fiber optic lines to follow the realigned UPRR tracks and then use the UPRR bridge to carry them across Paseo Padre Parkway. Although it is possible to relocate the fiber optic lines into the new UPRR alignment (assuming UPRR approves), UPRR will not allow utilities on their railroad structures. Therefore, this alternative assumes a prefabricated Cor-ten or painted steel utility bridge is placed adjacent to and west of the UPRR bridge over Paseo Padre Parkway. This utility bridge could also be used as a bicycle and pedestrian bridge to facilitate a possible path between Irvington and Central Park.

This alternative requires over 8300 linear feet of fiber optic relocation compared to only 200 feet in Utility Option 1. The trenching, ducting, splicing and other work required for fiber optic relocation is estimated to cost over \$200 per foot. Therefore, the added fiber optic relocation for this Option adds over \$10 million to the cost for a total estimated cost of \$11,320,000.

Staff Recommendations for Paseo Padre Parkway Utility Bridge: Staff recommends maintaining the current design by selecting the utility bridge on the current alignment (Utility Option 1). This option is the least expensive of the three, is included in the current plans and estimates and can accommodate all

of the fiber optic lines. It also provides an opportunity to use the bridge to facilitate a possible bicycle and pedestrian path.

Although the directional bore (Utility Option 2) is “only” \$330,000 more, it would not be supported by BART and could create problems for construction of the future Warm Springs Extension. In addition, it is hard to predict how difficult a directional bore will be to construct. This results in a greater risk of increased cost. Realigning the utilities into the new UPRR corridor (Utility Option 3) is very expensive and would require approval from UPRR to place the fiber optics in their new alignment. Even if UPRR could be convinced to allow utilities in their railroad bridge, the cost of this alternative would only be reduced by approximately \$375,000, still leaving Utility Option 3 as the most expensive of the three.

Staff further recommends that the utility bridge be made of Cor-ten (weathered) steel. The Cor-ten bridge fits with the more rural nature of the Paseo Padre Parkway area and is consistent with the theme of the aesthetic design for Paseo Padre Parkway portion of the project. In addition, Cor-ten steel does not require regular maintenance like a painted steel bridge. This would avoid approximately \$2,000 of annual maintenance costs associated with a painted bridge.

ENCLOSURE: Exhibits A through N depicting various elements of the project.

RECOMMENDATION:

1. Direct staff to proceed with the “Base Design” for landscaping and aesthetic treatments (Aesthetic Treatment Option 2).
2. Direct staff to proceed with the Paseo Padre Parkway utility bridge on the current UPRR alignment (Utility Option 1).

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